

ON AN HEMIPTEROUS INSECT FROM AN AUSTRALIAN
OPOSSUM'S NEST.

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(Communicated by A. M. Lea.)

[Read April 2, 1914.]

Specimens of the species dealt with in this paper were kindly communicated to me for determination by Professor E. C. Stirling, Director of the South Australian Public Museum. They were found under so interesting circumstances that the following report referring to their occurrence may be quoted from *The Adelaide Observer* of March 8, 1913:— "In preparing opossums in as life-like surroundings as possible for the new gallery, the Museum taxidermists found it desirable to procure a hollow limb, and obtained one near Adelaide. On sawing it off the limb was found to contain an opossum's nest, with the opossum (*Trichosurus vulpecula*, Kerr) at home in it. On further examination the nest was found to be swarming with insect life. Among these were noted thousands of larvæ of a small moth; thousands of *Acaridæ*, or mites, and *Psocidæ*, or book-lice; two kinds of tick, one a very peculiar sort; several interesting beetles, one of which is new to Science; and hundreds of a bug in all its stages. This last-named insect smells exactly like the bed-bug, but when matured is winged. It appears, however, to have the same unpleasant habits, as most of the larvæ and some of the mature specimens appeared to be gorged with blood. Seven pupæ of two kinds of flies were obtained, and many unidentified larvæ; of these latter two are very curious, and they probably belong to one of the lace-winged flies, of which some extremely beautiful species are known in South Australia. It is hoped, therefore, to rear some of the larvæ to the mature forms." The bugs mentioned in the above notice proved to belong to a new species of the genus *Clerada*, Sign., of the family *Myodochidæ*. Although the type of this genus is widely distributed both in the Old and the New World, nothing is known of the habits of it or of any other species of the genus, and only solitary specimens of them seem to have been taken. On the whole, very little is known of the food of the *Myodochidæ*, and although most of them are supposed to be phytophagous, exceptions from this rule doubtless occur. It is quite possible that the new *Clerada* is a regular inhabitant of opossums' nests, but, if so, I think this must be regarded as an acquired habit. The *Clerada*,

no doubt, finds plenty of food in the opossum's nest, but it is very unlikely that a member of this family draws blood from a warm-blooded animal. It is much more probable that it sucks out the Tineid and other soft-skinned larvæ so common in its haunt, unless it simply feeds on decaying vegetable matters in the nest. From the fact that the soft swollen abdomen of the larvæ is red in colour (like that of so many other Myodochild larvæ) and that the middle of the venter is often reddish in the imagines, it was hastily inferred that they were "gorged with blood."

CLERADA NIDICOLA, n. sp.

Black, above glabrous, both above and beneath very finely and thickly punctured; basal border of pronotum and posterior angles of propluræ tawny; the commissure, suture, and scutellar margin of the clavus also tawny, but very narrowly so; membrane greyish-fuscous; rostrum, orificia, middle of venter, and legs yellowish-ferruginous; trochanters black at tip; apex of femora and the whole tibiæ somewhat infuscated; antennæ black or fuscous, last joint, except a narrow sub-basal ring, very pale testaceous. Head as long as pronotum and as broad as it is long, the postocular part rounded on the sides, ocelli almost touching the eyes, vertex more than twice broader than an eye; the eyes seen from above much longer than broad; rostrum reaching posterior margin of second ventral segment; first joint of antennæ scarcely passing apex of head, second joint three times longer than first, third a little longer than first, fourth half as long again as the third joint or somewhat longer. Pronotum at apex distinctly broader than the head and a little broader than its own median length, at base about one-half broader than at apex, transversely impressed before the middle, the impression more pronounced at the sides, lateral margins a little reflected, scarcely or very slightly sinuated. Scutellum in the basal half with a transverse impression, in the apical half with a longitudinal median keel. Hemelytra in the male very slightly passing apex of abdomen, in the female reaching base of dorsal genital segment, the claval commissure as long as the scutellum. Abdomen beneath with scattered hairs along the apical margin of the segments; male genital segment viewed from behind deeply arcuately sinuate, the apical margin somewhat angularly prominent in the middle, the claspers crossed, pale-ferruginous. First joint of hind tarsi distinctly longer than the two other joints together. Length: ♂, 7 mm.; ♀, 8 mm.

South Australia (near Adelaide), in nest of *Trichosurus vulpecula*, Kerr.

This species is closely allied to *C. laticollis*, Horv., but is distinguished from it by the much broader vertex. Dr. Horváth, who has kindly compared specimens of *nidicola* with the type of *laticollis* in the Budapest Museum, writes to me that *laticollis* differs from the new species also in the following characters:—The upper side is still more finely and densely punctulate, the lateral margins of the pronotum are more distinctly reflexed, the orange-yellow basal border of the pronotum is strongly dilated exteriorly and thereby the humeral angles are very broadly yellow, this colour being narrowly extended even along the lateral margins through three-fourths their length; and the legs are brownish, with only the coxæ, trochanters (except their black tip), and tarsi yellow. There are also some minor differences in the mutual length of the antennal joints. Horváth also writes that the female specimen standing in the Vienna Museum under the name *laticollis* may possibly, upon closer examination, prove to belong to *nidicola*.

The colour of the larvæ of *C. nidicola* is fuscous-black, but the abdomen is red, with the two or three last dorsal segments in the middle greenish-testaceous in hue; only in the youngest larvæ the abdomen is, at least sometimes, entirely black. In the oldest larvæ the apical flaps of the hemelytral parts of the scuto-tegmen are testaceous. The antennæ are brownish-testaceous, with the last joint (except a narrow basal ring) much paler. The legs are of a livid testaceous colour. The head is considerably longer than broad with much smaller eyes than in the imago and with no trace of ocelli even in the full-grown larvæ; in the youngest larvæ the eyes scarcely project beyond the postocular margins of the head, and the distance between the eyes is eight times broader than an eye. Rostrum notably longer than in the imago, reaching or slightly passing the middle of the venter. Antennæ constructed almost as in the imago, but in the youngest larvæ with the second joint comparatively shorter, being scarcely longer than the last joint. The larvæ before me belonging to the younger stages are in so poor condition that their other structural characters cannot be properly made out, but the two last stages show the following additional characters:—

Fourth Stage.—Distance between eyes six times broader than an eye. Pronotum three times broader than long in the middle, lateral margins narrowly reflexed, the transverse impression placed far behind the middle, anterior lobe more than three times longer than posterior lobe, with an impressed longitudinal median line not quite reaching the apical margin, and with a foveate impression on each side of the disk. Scutellum coalescent with the tegmina, but separated from

them by an obtuse impression, and with a more or less impressed, sometimes paler, longitudinal median line; tegmina divergent, reaching the first dorsal abdominal segment, rounded at apex, their exterior margin reflexed, the inner (apical) margin oblique, angularly sinuate somewhat outside the apex of the scutellum, clavus not separated from corium. Length, 4-4.4 mm.

Fifth Stage.—Distance between eyes five times broader than an eye. Pronotum two times and a half broader than long in the middle, in other points as in the fourth stage. Scutellum as in the fourth stage; tegmina directed backwards, reaching a little beyond the base of the third dorsal abdominal segment, broadly rounded at apex, the inner (apical) margin parallel to the longitudinal axis of the body, arcuately sinuate somewhat outside apex of scutellum; structure of tegmina otherwise as in the fourth stage. Length, 5 mm.

Of this genus eight species are now known, five of which occur in Australia. As Australian entomologists may find *C. nidicola* or other species of the genus by examining opossum nests when opportunity arises, I think it useful to give a key to the Australian species with indications of the papers where complete descriptions of them can be found:—

1. (2) Head distinctly longer than broad and as broad as apex of pronotum, sides of its postocular part straight, ocelli somewhat distant from the eyes, first antennal joint passing apex of head by half its length. Brownish testaceous, antennæ fuscous with the last joint whitish, corium more or less obscurely infuscated on disk ... *apicicornis*, Sign.
2. (1) Head as long as broad or little longer, sides of its postocular part rounded, ocelli contiguous to the eyes or almost so.
3. (4) First antennal joint passing apex of head by half its length. Pronotum at apex as broad as the head. Ferruginous, including last antennal joint, but membrane fuscous with a whitish streak at the exterior basal angle ... *ferruginea*, Horv.
4. (3) First antennal joint scarcely or not much passing apex of head. Ground-colour black. Membrane fuscous, unicolorous.
5. (8) Pronotum at apex conspicuously broader than head, its basal border yellowish. Last antennal joint, except a narrow black basal ring, very pale testaceous.

6. (7) Vertex one-half broader than an eye. Yellowish basal border of pronotum strongly dilated at humeral angles *laticollis*, Horv.
7. (6) Vertex more than twice broader than an eye. Yellowish basal border of pronotum not dilated at humeral angles *nidicola*, Bergr.
8. (5) Pronotum at apex not broader than head, its humeral angles red. Last antennal joint black with a rather broad white subbasal ring *rufangula*, Bergr.

CLERADA.

Signoret in Maillard, Notes sur l'Ile de la Réunion, Ins., p. 28 (1863); Stal, Hem. Afr. ii., 155 (1865); Distant, Rhynch. Brit. Ind. ii., 45 (1903).

1. *Cl. apicicornis*, Sign., l.c., pl. xx., fig. 8; Stal and Distant, ll. cc.; Horv., Ann. Mus. Nat. Hung. vii., 622 (1909); *Gastrodes terminalis*, Walk., Cat. Hem. Het. Brit. Mus. v., 122 (1872).

Australia (without precise locality). Almost cosmopolitan, but not found in the palearctic and nearctic regions.

2. *Cl. ferruginea*, Horv., Ann. Mus. Nat. Hung. vii., 624 (1909).
Australia (without definite locality).

3. *Cl. laticollis*, Horv., l.c.
Queensland (Mackay).

4. *Cl. nidicola*, Bergr., *supra*.
South Australia (Adelaide).

5. *Cl. rufangula*, Bergr., Proc. Roy. Soc. Victoria vii., 295 (1895).
Western Australia.

Of the three remaining species two are known from New Guinea and one from Borneo.

Turtola, Finland, November, 1913.